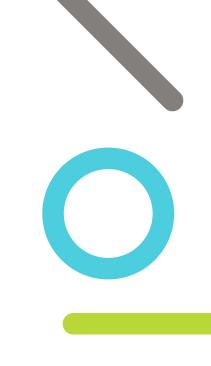
# who has nutrients that are more bioavalable?

we do.

**GPM**<sup>™</sup> fermented vitamins







## who helps you tie into market trends?

#### we do.

- fermented foods are very popular in the market right now and are considered healthy and natural by consumers
- studied for their influence on the gut microbiome, which include which include supporting cardiovascular health, proper immune system function and general gastrointestinal well-being

Ashland's unique offerings with GPM™
nutrients provide the health benefits of
fermented foods/nutrients with the
convenience of supplementation



## who has a new approach for nutrients?

#### we do.

## GPM<sup>TM</sup> fermented nutrients are different from traditional nutrients

- nutrients bound to a food source are more bioavailable<sup>1-9</sup>
- fermented nutrients have a slow, sustained release<sup>9,10</sup>
- allows for a time-release effect, particularly important for the watersoluble vitamins (B-vitamins, Vitamin C) which are either utilized by the body or quickly excreted<sup>10</sup>





## who puts the "new" in nutrient?

#### we do.

#### benefits of GPM<sup>TM</sup> fermented nutrients

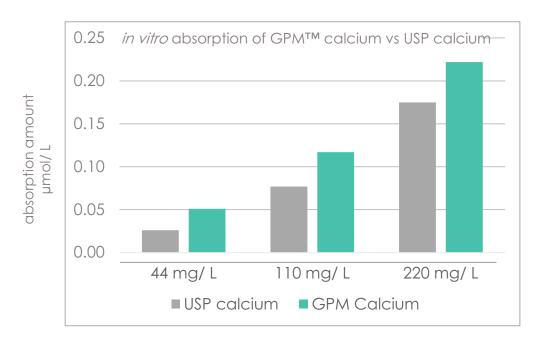
- o increased absorption and bioavailability<sup>1-10</sup>
  - the whole food nutrient matrix is very gentle on the stomach
- organic/non-GMO\*/gluten-free/soy-free versions available
- allows for product differentiation





## one example

### calcium absorption



data illustrating improved absorption of a GPM nutrient vs USP nutrient at increasing dosage amounts<sup>5</sup>



## full line up of nutrients

#### GPM<sup>TM</sup> nutrients currently available<sup>\*</sup>

o beta-carotene

o biotin

o calcium

o copper

o chromium

o folic acid

o iodine

o iron

o lecithin

o manganese

o molybdenum

niacinamide

o pantothenic acid

o potassium

o selenium

o vitamin A

o vitamin B1

vitamin B2

vitamin B6

o vitamin B12

o vitamin C

o vitamin D3

o vitamin E

vitamin K1

o Zinc

CoQ 10

o botanicals also available

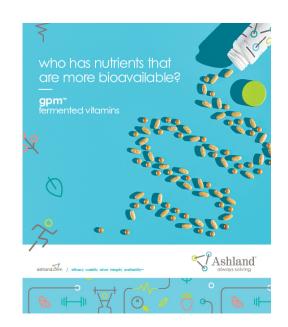


<sup>\*</sup>studies have not been conducted on all possible nutrients

## who has products you can trust?

#### we do.

- o made with patented process
- o gluten free
- o non-GMO\*
- o Kosher certified
- o soy-free versions available
- o organic versions available
- o made in Kearny, New Jersey







### references

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- 2. Internal *in vitro* test data for Vitamin B3 (as Niacinamide) GPM vs USP. Method: Fiorani et al., 2003, *Free Radical Research*, 37:1331-1338.
- 3. Internal *in vitro* test data for Vitamin B6 (as Pyridoxine) GPM vs USP. Method: Fiorani et al., 2003, *Free Radical Research*, 37:1331-1338.
- 4. Internal *in vitro* test data for Vitamin C (Ascorbic acid) GPM vs USP. Methods: Fiorani et al., 2003, *Free Radical Research*, 37:1331-1338 & J. Agric Food Chem 55:8941-9, 2007
- 5. Internal in vitro test data for Calcium GPM vs USP. Method: Fiorani et al., 2003, Free Radical Research, 37:1331-1338.
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- 8. Internal in vitro test data for Zinc GPM vs USP. Method: Fiorani et al., 2003, Free Radical Research, 37:1331-1338.
- 9. Relative bioavailability of CoQ10 Plus® compared to USP CoQ10 isolate, CoQ10 National Brand A, and CoQ10 National Brand B. Internal *in vivo* human testing study.
- 10. Comparative human bioavailability of two forms of CoQ10 and comparative antioxidant ability of two forms of CoQ10. Internal in vivo human testing study.



## always solving™



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